

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) An electrochemical cell comprising:
a cathode containing MnO₂;
an anode containing lithium; and
an electrolyte containing a bis(oxalato)borate salt,
wherein the cell includes an aluminum surface in electrical contact with a second metal surface, wherein the second metal surface is different from the aluminum surface.
2. (Previously Presented) The electrochemical cell of claim 1, wherein the bis(oxalato)borate salt is lithium-bis(oxalato)borate.
3. (Original) The electrochemical cell of claim 1, wherein the electrolyte contains a second salt.
4. (Original) The electrochemical cell of claim 3, wherein the second salt comprises a lithium salt.
5. (Original) The electrochemical cell of claim 1, wherein the second metal surface is a steel surface.
- 6-7. (Cancelled).
8. (Original) The electrochemical cell of claim 1, wherein the cell includes a cathode current collector comprising aluminum.

9. (Original) The electrochemical cell of claim 1, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration that is equal to or less than about 0.2 M.

10. (Original) The electrochemical cell of claim 9, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.15 M.

11. (Original) The electrochemical cell of claim 10, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.1 M.

12. (Original) The electrochemical cell of claim 11, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.05 M.

13. (Cancelled)

14. (Original) The electrochemical cell of claim 1, wherein the aluminum surface is a portion of an object having at least one dimension greater than 0.5 millimeter.

15. (Original) The electrochemical cell of claim 1, wherein the aluminum surface is a portion of an object having at least one dimension greater than one millimeter.

16. (Original) The electrochemical cell of claim 1, wherein the aluminum surface is a portion of an object having at least one dimension greater than two millimeters.

17. (Original) An electrochemical cell comprising:
a cathode containing an aluminum current collector;
an anode; and
an electrolyte containing a bis(oxalato)borate salt and a second salt comprising a lithium salt, wherein the cell is a primary electrochemical cell.

18. (Previously Presented) The electrochemical cell of claim 17, wherein the bis(oxalato)borate salt is lithium-bis(oxalato)borate.
19. (Original) The electrochemical cell of claim 17, wherein the cathode contains MnO_2 .
20. (Original) The electrochemical cell of claim 17, wherein the anode contains lithium.
21. (Original) The electrochemical cell of claim 17, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration that is equal to or less than about 0.2 M.
22. (Original) The electrochemical cell of claim 21, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.15 M.
23. (Original) The electrochemical cell of claim 22, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.1 M.
24. (Original) The electrochemical cell of claim 23, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.05 M.
- 25-27. (Cancelled)
28. (Previously Presented) The electrochemical cell of claim 17, wherein the second salt comprises lithium trifluoromethanesulfonate.
29. (Withdrawn) The electrochemical cell of claim 17, wherein the electrolyte further comprises a third salt comprising a lithium salt.
30. (Withdrawn) The electrochemical cell of claim 29, wherein the third salt comprises lithium trifluoromethanesulfonate or lithium trifluoromethanesulfonimide.

31. (Original) An electrochemical cell comprising:
a cathode containing MnO₂;
an anode containing lithium;
an aluminum surface; and
an electrolyte containing a bis(oxalato)borate salt at a concentration that is equal to or less than about 0.2 M.

32. (Previously Presented) The electrochemical cell of claim 31, wherein the bis(oxalato)borate salt is lithium-bis(oxalato)borate.

33. (Original) The electrochemical cell of claim 31, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.15 M.

34. (Original) The electrochemical cell of claim 33, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.1 M.

35. (Original) The electrochemical cell of claim 34, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.05 M.

36-38. (Cancelled).

39. (Original) An electrochemical cell comprising:
a cathode containing MnO₂;
an anode containing lithium; and
an electrolyte containing a bis(oxalato)borate salt at a concentration that is equal to or less than about 0.2 M,
wherein the cell is a primary cell.

40. (Previously Presented) The electrochemical cell of claim 39, wherein the bis(oxalato)borate salt is lithium-bis(oxalato)borate.

41. (Original) The electrochemical cell of claim 39, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.15 M.

42. (Original) The electrochemical cell of claim 41, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.1 M.

43 (Original) The electrochemical cell of claim 42, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.05 M.

44. (Cancelled).

45. (Original) An electrochemical cell comprising:
a cathode containing MnO₂;
an anode containing lithium; and
an electrolyte containing a bis(oxalato)borate salt at a concentration of less than about 0.2 M.

46. (Previously Presented) The electrochemical cell of claim 45, wherein the bis(oxalato)borate salt is lithium-bis(oxalato)borate.

47. (Withdrawn) A method of inhibiting aluminum corrosion in an electrochemical cell, the method comprising:
a. adding a bis(oxalato)borate salt to an electrolyte; and
b. placing the electrolyte, an anode containing lithium, and a cathode containing an aluminum current collector into a cell case to form the cell, wherein the cell is a primary electrochemical cell.

48. (Withdrawn) The method of claim 47, wherein the bis(oxalato)borate salt comprises a member selected from the group consisting of lithium-bis(oxalato)borate, potassium-bis(oxalato)borate, and sodium-bis(oxalato)borate.

49. (Withdrawn) The method of claim 47, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration that is equal to or less than about 0.2 M.

50. (Withdrawn) The method of claim 49, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.15 M.

51. (Withdrawn) The method of claim 50, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.1 M.

52. (Withdrawn) The method of claim 51, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.05 M.

53. (Withdrawn) The method of claim 52, wherein the electrolyte contains the bis(oxalato)borate salt at a concentration of less than about 0.025 M.

54. (Withdrawn) The method of claim 47, wherein the cathode comprises MnO_2 .

55. (New) The electrochemical cell of claim 1, wherein the cell comprises a cathode current collector comprising the aluminum surface and the second metal surface is a stainless steel surface.

56. (New) The electrochemical cell of claim 17, wherein the aluminum current collector is in contact with a stainless steel surface.

57. (New) The electrochemical cell of claim 31, wherein the cell comprises a cathode current collector including the aluminum surface.

Applicant : Dana Alexa Totir et al.
Serial No. : 10/800,905
Filed : March 15, 2004
Page : 8 of 14

Attorney's Docket No.: 08935-270001 / M-4996/Z-
03622

58. (New) The electrochemical cell of claim 57, wherein the aluminum surface of the cathode current collector is in contact with a stainless steel surface.